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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,825	07/28/2003	Ramabadran S. Raghavan	LUCW:0002	3721

7590 07/27/2005

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EXAMINER	
FERGUSON, KEITH	
ART UNIT	**PAPER NUMBER**
2683	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/628,825	RAGHAVAN ET AL.	
	Examiner	Art Unit	
	Keith T. Ferguson	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: The specification is confusing because it recites an "undedicated public network as an internet network" (figure 1 number 16 and figure 2 number 16, and page 2 paragraph 0023), and then recites a "public network as a internet network" (figure 1 number 16 and figure 2 number 16 and page 2 paragraph 0024).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-7,10,12-16 and 22-30 are rejected under 35 U.S.C. 102(e) as being anticipate by Chang et al..

The claimed invention reads on Chang et al..as follows:

Regarding claims 1-7,10,28 and 29, Chang et al. discloses a wireless communications system (fig. 2)/method (fig. 11) comprising: at least one transceiver unit (base station) (structure) (tower) (building)(fig. 2 number 16) adapted to communicate over an air interface with portable communications devices (fig. 2 number 18) and adapted to communicate over an undedicated public network (internet)(fig. 2 number 34); and an access network unit (fig. 2 number 14) adapted to communicate with the at least one transceiver unit (portable communication device) (computer having a modem) (fig. 2 number 16)(col. 1 lines 40-43) over the public network (internet)(fig. 2 number 34).

Regarding claims 12 and 13, Chang et al. discloses a services network (mobile switching center) communicatively coupled to the access network unit (fig. 2 number 12).

Regarding claim 14, Chang et al. discloses a publicly switched telephone network (PSTN) (fig. 2 number 20).

Regarding claims 15,22 and 23, Chang et al. discloses an access network unit (fig. 2 number 14) for use with a wireless communications system (fig. 2), the access network unit comprising: a communication interface (transceiver server)(fig. 2 number 16) to facilitate communication between the access network unit (fig. 2 number 14) and at least one transceiver

unit (fig. 2 number 18) over an undedicated public network (internet)(fig. 2 number 34). Chang et al. further teaches an access network controller (mobility agents)(fig. 2 number 42).

Regarding claims 16,24-27 and 30, Chang et al. discloses one protocol layer (fig. 6 and col. 7 line 65 through col. 8 line 18).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 8,9,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. in view of Yuhara et al..

Regarding claim 8, Chang et al. discloses a wireless communications system as discussed supra in claims 1 and 7 above. Chang et al. differs from claim 8 of the present invention in that it does not disclose the portable communications device comprises a cellular telephone. Yuhara et al. teaches a communication system comprising a cellular phone (fig. 3 number 336 and paragraph 0043). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chang et al. with a cellular telephone in order for the mobile station to receive mobile cellular telephone service from the mobile switching center, as taught by Yuhara et al..

Regarding claim 9, Chang et al. discloses a wireless communications system as discussed supra in claims 1 and 7 above. Chang et al. differs from claim 9 of the present invention in that it does not disclose a vehicle having at least one of a mobile telephone and a navigation system. Yuhara et al. teaches a vehicle having a cellualr telephone and a GPS navigation system (paragraph 0034 and paragraph 0047). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chang et al. with a vehicle having at least one of a mobile telephone and a navigation system in order for communication system to provide navigational directions to the wireless mobile station for a mobile communication advertisement presented by a merchant, as taught by Yuhara et al..

Regarding claim 11, Chang et al. discloses a wireless communications system as discussed supra in claim 1 above. Chang et al. differs from claim 11 of the present invention in that it does not disclose a satellite system adapted to facilitate communications between the at least one transceiver unit and the access network unit. Yuhara et al. teaches a satellite system adapted to facilitate communications between a satellite transmitter and a server (fig. 3 numbers 308,310 and 302). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chang et al. with a satellite system adapted to facilitate communications between the at least one transceiver unit and the access network unit in order to provide communication system to provide voice and data communication over a very large area, as taught by Yuhara et al..

4. Claims 17,18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. in view of Bao et al..

Regarding claims 17,18 and 21, Chang et al. discloses an access network unit as discussed supra in claims 15 and 16 above. Chang et al. differs from claims 17,18 and 21 of the present invention in that it does not disclose the protocol layer maintains an IP address of the at least one transceiver unit, maps an IP address of the at least one transceiver unit to

a communications technology supported by the at least one transceiver unit to facilitate transfer of information dependent upon such communications technology to the at least one transceiver unit and encapsulates higher layer protocol information to facilitate protocol requirements of the public network. Bao et al. teaches an access network unit (fig. 1 number 21) wherein a higher protocol layer maintains an IP address of a mobile station and maps an IP address of the at mobile station to a communications technology (point to point protocol) (PPP) supported by the to facilitate transfer of information dependent upon such communications technology to the mobile station)(paragraph 0083). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chang et al. with the protocol layer maintains an IP address of the at least one transceiver unit and maps an IP address of the at least one transceiver unit to a communications technology supported by the at least one transceiver unit to facilitate transfer of information dependent upon such communications technology to the at least one transceiver unit and encapsulates higher layer protocol information to facilitate protocol requirements of the public network in order for the base station controller to provide internet services to the mobile station when the mobile station switches from cellular voice service to data services, as taught by Bao et al..

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being

unpatentable over Chang et al. in view of Zhigang.

Regarding claim 19, Chang et al. discloses an access network unit as discussed supra in claims 15 and 16 above. Chang et al. differs from claim 19 of the present invention in that it does not disclose the protocol layer provides security information to the at least one transceiver unit to facilitate secure communication over the public network. Zhigang teaches a Transport layer security which provides security within a mobile station transport connection (paragraph 0036). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chang et al. with the protocol layer provides security information to the at least one transceiver unit to facilitate secure communication over the public network in order for the base station controller to provide a secure link to the mobile station when an internet transaction is requested, as taught by Zhigang.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. in view of Ahmed et al..

Regarding claim 20, Chang et al. discloses an access network unit as discussed supra in claims 15 and 16 above. Chang et al. differs from claim 20 of the present invention in that it does not disclose the protocol layer negotiates quality of service for communications with the at least one transceiver unit over the public network. Ahmed et al. teaches a Mac Layer protocol negotiates quality of service for resources during a call in a mobile environment (paragraph 0048). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chang et al. with the protocol layer negotiates quality of service for communications with the at least one transceiver unit over the public network in order for the base station to set up a voice connection with the MSC or data connection with the internet for the mobile station, as taught by Ahmed et al..

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rai et al. (U.S. Patent 6,421,714) discloses an access network unit (fig. 2 number 40) adapted to communicate with a wireless station (fig. 2 number 32) over a wireless network (fig. 2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (571) 272-7865. The examiner can normally be reached on 6:30am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be

reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KEITH FERGUSON
PRIMARY EXAMINER

Keith Ferguson
Art Unit 2683
July 15, 2005